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Utz, S.

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## **Types of Deception and Underlying Motivation : What People Think**

Sonja Utz

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# Types of Deception and Underlying Motivation

## *What People Think*

SONJA UTZ

*Free University Amsterdam*

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In computer-mediated communication, there are various types of possible deception such as category deception (gender switching), attractiveness deception, or identity concealment. The present article argues that it is meaningful to differentiate among these types of deception. More specifically, it is assumed that people attribute the various types of deception to different motivations and that these assumed motivations determine the evaluation of the deception. To examine whether individuals indeed attribute different types of deception to different underlying motivations, a scenario study was conducted. The results were in line with the expectations. For example, identity concealment was mainly attributed to privacy concerns, whereas gender switching was mainly perceived as playing with new roles and unknown aspects of the self. The assumed malicious intention predicted the evaluation of the deception.

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**Keywords:** deception; motivation; attribution

Deception is a ubiquitous phenomenon in real life (DePaulo, Kashy, Kirkendol, Wyer, & Epstein, 1996) as well as in cyberspace (Whitty, 2002). The aim of the current article is to examine the perceived underlying motivations—what do the deceived persons think are the motives of the deceivers? It is proposed that different types of deception in cyberspace are attributed to different motivations.

This assumption is not entirely new. For a long time, scholars have thought about the possible motivations underlying deceptive acts and possible classifications of deceptive acts. Goffman (1974), for example, made a distinction between exploitive fabrications and benign fabrications. Fabrications are defined as “the intentional effort of one or more individuals to manage activity so that a party of one or more others will be induced to have a false belief about what is going on” (Goffman, 1974, p. 83). Benign fabrications are in the interests of the deceived or at least do not harm him or her, whereas exploitive fabrications clearly aim to serve the deceiver and harm the other.

Other researchers (e.g., Camden, Motley, & Wilson, 1984; Hample, 1980) have developed more specific taxonomies of forms of deception. For example, Lindsold and Walters (1983) distinguished six forms of lies that can be rank ordered in terms of how acceptable they are. They related these types of lies to the social motivations underlying interpersonal behavior in general, ranging from altruistic motivations to exploitative motivations. Telling a lie to save others was considered as highly acceptable, whereas telling a lie that hurts someone else only to gain personally was judged as highly unacceptable. Lindsold and Walters reported the results of three studies in which they found a nearly perfect match between a priori categorization and judgment of acceptance.

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The present article focuses on the question of whether the various forms of deception on the Internet can be classified in a similar way. Do people consider different forms of deception as differently acceptable? Moreover, do they also attribute the different forms of deception to different motivations? It is assumed that deception on the Internet and deception in real life are not fundamentally different. There might be differences in relative frequency, but the underlying motivations should be the same. Lindsfold and Walters (1983) found high agreement among individuals on the acceptability of a specific lie. The aim of the present research is to examine whether people also agree on the severity and assumed underlying motivations of deception on the Internet.

## DECEPTION ON THE INTERNET

The Internet offers some new possibilities for deception and makes many well-known forms of deception easier (Kendall, 1998; Noonan, 1998). Gender switching, that is, pretending to be male as a female and vice versa, is very difficult in face-to-face interactions in which the gender of an individual is mostly discerned immediately. Many cues implying deception are nonverbal (Ekman & Friesen, 1969) and are therefore missing in text-based computer-mediated communication (CMC). This does not mean that it is impossible to detect deception in CMC for example by focusing on the differences in linguistic style between males and females in the case of gender switching (Colley & Todd, 2002). However, as it takes longer to get to know the other in CMC than in face-to-face (FtF) communication (Walther, 1992), it will often also take longer to detect deception in CMC.

There are several types of deception on the Internet. Donath (1999) distinguished among identity concealment, category deception, trolls, and impersonation. According to Donath (1999, p. 52), identity concealment often involves merely acts of omission rather than acts of commission. A person tries to hide his or her identity, for example, by using a pseudonym or a wrong name. Category deception is giving the impression of being a particular type (p. 49). Gender switching is probably the most well-known form of category deception. Other forms would include age deception or enhancement of status. What Cornwell and Lundgren (2001) call misrepresentation, that is, the tendency of people to describe themselves in an idealized way, might also be regarded as a mild form of category deception (presenting oneself as more attractive, thin, or rich). A troll is a character invented to disturb the conversation in a newsgroup by asking provoking questions or by disseminating poor advice. Impersonation means to pretend to be another user, that is, writing e-mails or messages in his or her name or even stealing his or her account.

The present article focuses on three of these types of deception, namely gender switching, attractiveness deception, and identity concealment. These types were chosen because they are rather common. Whitty (2002) reported that 28% of male chat users have lied about their gender. Cornwell and Lundgren (2001) conducted a study of people who have formed romantic relationships in cyberspace and found that 28% of the respondents misrepresented their physical characteristics such as hair color, weight, or state of health. According to a Pew Internet Project survey (2000), about one fourth of the users had lied at least once when asked for personal data. To know the attributed motivations is important because people base their reactions on these perceived intentions. Ames, Flynn, and Weber (2004) found, for example, that perceived intentions of a helper influenced the reactions of the helped person. Individuals who assumed that the other helped because he or she cared for them reacted more positively than did those who assumed that he or she did it only because he or she was obliged to do so by his or her role.

## POSSIBLE MOTIVATIONS

Deception on the Internet can be caused by a variety of motivations. Joinson and Dietz-Uhler (2002) considered psychiatric illness, identity play, and expressions of true self as explanations in a specific case of category deception. The present article focuses on privacy concerns, idealized self-presentation, play, and malicious intention as possible motivations because prior studies have shown that these are especially relevant for the chosen forms of deception.

As mentioned earlier, a Pew Internet Project survey (2000) found that privacy concerns often motivate people to give invalid personal information when asked for it on web sites. People also use more anonymous and thus identity-concealing e-mail addresses in venues where spam mails can be expected (Utz, 2004). Whitty and Gavin (2001; see also Whitty, 2002) found that women in chat rooms lie for reasons of safety: They do not want to be tracked down. Thus, there is evidence that privacy concerns and the desire to avoid unwanted obtrusions by others are important motivations for deception.

Another motivation is idealized self-presentation. Most people try to present themselves in a favorable way, in FtF communication and in CMC. However, it is easier to do so in CMC than in FtF communication (cf. Walther, 1996). The same picture is found in flirt lines online as in traditional newspaper singles advertisements (e.g., Koestner & Wheeler, 1988): Most users claim to be attractive either in terms of beauty or in terms of socioeconomic status. Especially men tend to lie about their education, occupation, and income (Whitty, 2002). Idealized self-presentation might be a frequent motivation in all cases of misrepresentation: age, attractiveness, and socioeconomic status.

Turkle (1995) and Bargh, McKenna, and Fitzsimons (2002) argue that CMC allows people to detect unknown aspects of their true self by playing with different roles and identities. Whitty (2003, p. 346) proposes that Internet flirting can also be best understood as a type of play. Playing with the possibilities of CMC—either just for fun or to detect new aspects of the self—might therefore be another motivation, especially for various types of category deception.

The three motivations described so far are mainly self-benefiting but do not intend to harm the other. However, some types of deception might be caused by a more malicious motivation. People might intend to annoy a specific person (e.g., for reasons of personal dislike). Some people might also aim to provoke a whole community, as it is reported for trolls (Donath, 1999). Malicious intention is therefore considered as a fourth possible motivation.

The goal of the present article is to examine whether people consensually judge the different types of deception as more or less severe and whether they attribute them systematically to different motivations. The article focuses on attributed rather than actual intentions because the deceived base their reactions on the perceived and not on the actual intentions.

## METHOD

### *Participants and Design*

Participating in the study were 88 students of Chemnitz University of Technology; 23 participants were male and 65 were female. The mean age was 23 years (range: 18 to 44 years). Mean Internet experience was 39 months ( $SD = 19$ ), and people spent on average 7 hours ( $SD = 8$ ) per week on the Internet. Most participants were highly experienced with e-mail and the World Wide Web, but not all participants were well acquainted with news-

groups, chat rooms, or other online services. Because most types of deception occur in these venues, experience with chats (median split) was included as an additional variable. The study had a 2 (chat experience: low vs. high) by 3 factorial (scenario: identity concealment vs. attractiveness deception vs. category deception) mixed design. The first factor (chat experience) was a between-subjects factor; the second factor (scenario) was a within-subjects factor.

### *Measures*

Participants were presented with three scenarios each describing a specific type of deception. The selected types were identity concealment, attractiveness deception, and gender switching. The scenarios were described very briefly and in general terms to minimize the possibility that the specific details given in the scenario were the basis for the attributions rather than the type of deception per se. Order of the scenarios was randomized. The scenarios were presented in German; in the next paragraph, close English translations are reported.

The scenario for identity concealment was described as, "A person participates under a wrong name (by using an expressly chosen web.de or gmx e-mail address) in a newsgroup discussion (a sort of bulletin board in the Internet)." The attractiveness deception scenario read, "A person misrepresents his or her attractiveness or weight in a flirt channel towards another person with whom he or she gets along very well." The scenario for gender switching read, "A person pretends to be a person of the opposite sex in a chat."

General evaluation of the deception was assessed by asking participants how severe they considered the type of deception to be on a 7-point scale. A number of items assessed the assumed underlying motivation in more detail. Participants were presented with a list of possible motivations. They were asked to indicate on a 7-point scale ranging from *not at all* to *very much* for each reason how much they thought it would be the reason underlying the behavior. It was stated that the purpose of the study was to examine how they would spontaneously attribute this behavior, not which reason might also be possible under certain circumstances.

The reasons covered the following motivations: privacy concerns (five items; e.g., wants to stay anonymous, does not want to reveal too much personal information); play (with roles and the possibilities of the medium; five items; e.g., for fun, wants to explore new roles); idealized self-presentation (five items; e.g., wants to impress the other, wants to appear more attractive); and malice (four items; e.g., wants to provoke, wants to make trouble). Because of the within-subjects design, alphas were calculated separately for each scenario. Of the alphas, 10 of 12 ranged between .73 and .90, with the exceptions being privacy concerns in scenario 1 (.46) and play in scenario 3 (.45). However, a confirmatory factor analysis (with varimax rotation) on the pooled data from all scenarios indicated the construct validity of the four scales. To keep scales comparable across scenarios, all four scales were used as described.

## **RESULTS**

Because the scenario was varied within subjects, the following analyses of variance use a repeated-measurements design. This is functionally equivalent to a multivariate analysis of variance in a between-subjects design.

General evaluation of the situations was analyzed by a 2 (experience) by 3 (deception type) analysis of variance with repeated measures on the last factor. This analysis showed a

**TABLE 1**  
**Attributed Motivations by Deception Type**

	<i>Privacy Concerns</i>	<i>Idealized Self-Presentation</i>	<i>Play</i>	<i>Malice</i>
Attractiveness deception	3.51	6.54	4.29 <sub>a</sub>	2.47
Category deception	4.47	3.82 <sub>b</sub>	5.77	3.94 <sub>b</sub>
Identity concealment	6.14	3.66 <sub>bc</sub>	4.25 <sub>a</sub>	3.47 <sub>c</sub>

NOTE: Within a row and within a column, means having the same subscript are not significantly different from each other at  $p < .05$ .

significant main effect of deception type,  $F(2, 85) = 37.02, p < .001$ . Attractiveness deception was judged as most severe ( $M = 4.47$ ), followed by gender switching ( $M = 3.75$ ). Identity concealment was judged as less severe than the other two types ( $M = 2.57$ ), all  $ps < .01$ . No other effects were significant,  $F_s < 1$ .

For attributed motivation, a 2 (experience) by 3 (deception type) by 4 (motivation) analysis of variance with repeated measurement on the last two factors revealed a significant main effect of experience,  $F(1, 86) = 4.30, p < .05$ . Experienced users made stronger attributions ( $M = 4.49$ ) than did less experienced users ( $M = 4.24$ ).<sup>1</sup> There was also a significant interaction between scenario and motivation,  $F(6, 516) = 188.16, p < .001$ . As can be seen in Table 1, the scenarios can be clearly distinguished by the attributed underlying motivations.

Attractiveness deception is primarily attributed to a desire to present oneself in an idealized way and can also be attributed to play. Gender switching is mainly attributed to play. Identity concealment is mainly attributed to privacy concerns and to some extent to play. No type of deception is primarily attributed to malice, confirming that indeed less severe types of deception were selected for the study. No other effects, especially no interaction effects with chat experience, were significant, all  $F_s < 1.39, ns$ . That is, although experience with chats did lead to more determined attributions, the pattern was the same for low and high experienced users.

Interestingly, the reliabilities for privacy concerns and play were extremely low for exactly those scenarios that were primarily attributed to these reasons. This unexpected finding could simply mean that people differentiated more between the items belonging to this motivation scale when the motivation was perceived as relevant for the respective scenario. Therefore, a closer look at the items of privacy concerns in the case of identity concealment and at the items of play in the case of gender switching was taken. In fact, people attributed identity concealment primarily to the motives wants to stay anonymous ( $M = 6.84$ ) and wants to be safe from sanctions ( $M = 5.56$ ) but not to wants to protect his or her privacy ( $M = 2.78$ ). For gender switching, the closer analysis of the items of the play subscale revealed that gender switching was attributed more to wants to test new roles ( $M = 6.02$ ) and wants to explore other aspects of his or her personality ( $M = 5.50$ ) than to does that for fun ( $M = 4.05$ ).

To test whether the assumed motivations determine the evaluation of the deceptions, three regression analyses were conducted (using a forced entry of all predictors simultaneously to be able to compare the three scenarios). The criterion variable was evaluation of the respective type of deception; the predictors were the four motivations. The evaluation of identity concealment was predicted by play ( $\beta = -.31$ ) and malice ( $\beta = .43$ ),  $F(4, 87) = 6.54, p < .001$ ,  $R^2_{\text{adj}} = .20$ . For attractiveness deception, the regression analysis was not significant,  $F(4, 87) = 1.73, p = .15$ ,  $R^2_{\text{adj}} = .03$ . However, idealized self-presentation ( $\beta = .22$ ) and malice ( $\beta =$



.24) had the highest beta weights. The evaluation of gender switching was only predicted by malice ( $\beta = .49$ ),  $F(4, 87) = 7.06$ ,  $p < .001$ ,  $R^2_{\text{adj}} = .22$ . As expected, the perceived harmfulness predicted the overall evaluation of the deception.

## DISCUSSION

The three types of deception were clearly evaluated differently and were attributed to different motivations. Attractiveness deception was perceived as most severe, followed by gender switching and identity concealment. Whereas attractiveness deception was perceived as being caused primarily by a desire to present oneself in an idealized way, gender switching was attributed mainly to playing with different roles or aspects of the self. Identity concealment on the other hand was ascribed to privacy concerns.

Thus, as previously reported for several types of lies occurring in FtF situations (Lindskold & Walters, 1983), people also agreed on the severity of various forms of deception occurring in cyberspace. There was consensus about the assumed underlying motivations as well. Interestingly, there was no influence of chat experience on the pattern of attributions per se. High experienced chatters were only more determined in their attributions. That is, more experience with the medium does not lead to a more differentiated or an entirely different view on possible motivations.

The assumed motivations are also in line with studies that focused on actual intentions. The Pew Internet Project survey (2000) reported that privacy concerns lead to identity concealment, and studies on romantic relationships in cyberspace have shown that men tend to present themselves in an idealized way by lying about their socioeconomic status (Whitty, 2002). According to Bargh et al. (2002) and Turkle (1995), playing with different aspects of the self is a central motivation for category deceptions such as gender switching. Thus, although it is known that individuals' attributions in general are biased by several factors (e.g., the fundamental attribution error; Jones & Harris, 1967), there is also some evidence that individuals' assumptions about the motivations of other people are not totally invalid.

How much do the assumed motivations influence the evaluation of the deceptive act? The regression analyses showed that evaluation was mainly predicted by the subscale malice. Thus, although people attribute the forms of deception to different motivations such as idealized self-presentation or privacy concern, they base their evaluation mainly on malicious intention. The more intention to harm others that people assumed, the less positively they evaluated the respective type of deception. However, it is noteworthy that perceived malicious intention was not perfectly correlated with perceived severity. More specifically, attractiveness deception was judged more severely than would have been expected by the low rating of malicious intent. A possible explanation for this inconsistency might be a difference in level of involvement. Interactions in chats are often relatively superficial and shallow. People also form friendships in chats, but the percentage of romantic relationships should be lower than in flirt lines. People signing up in an online flirt line are looking explicitly for a partner and might consequently place high hopes on their interaction partner. If the putative dream partner turns out to be much less attractive than he or she pretended to be, these people might be really disappointed and feel hurt. Whitty and Gavin (2001) report that trust and honesty in online relationships are as important as in FtF relationships. Being deceived by a close other might therefore hurt much more than being deceived by an acquaintance in a chat. Future studies should therefore also control for the level of closeness and involvement between the interaction partners.

The present study is a first attempt to examine whether people differentiate among various types of deception. Therefore, many questions remain open. One limitation of the cur-



rent study is that it concentrated only on three types of deception. The sample was also rather homogeneous as only students participated. However, most users of chats are young adults (Pew Internet Project, 2003). Besides, chat experience did not alter the pattern of results. Nevertheless, it is possible that older people who have more experience of life draw different conclusions about the assumed underlying motivations. Lindsfold and Walters (1983, Study 1) found a higher acceptance of, for example, lying on an income tax return within a sample of older people and explained this with a distinction between practical realism and youthful idealism. Further studies should therefore use a more heterogeneous sample.

The present study was a scenario study. This approach has the advantage that the situation is held constant for all participants, and the setting is therefore relatively controlled. In a field study, it would be much more complicated to compare different types of deception because there would be much more variance within each type of deception that could cause the differences in evaluation. Nevertheless, it would be desirable to complement the findings of the present study by a field study.

The results show clearly that different types of deception are attributed to different motivations and that the evaluation of the deception depends to some extent on these perceived motivations. Self-protection is a highly accepted motivation for deceiving others, whereas intention to harm others is not. Other types of deception are attributed to intention to harm others to various degrees. When studying reactions on deception, one should therefore bear in mind that the results found for one type of deception cannot be easily generalized to other types of deception.

## NOTE

1. The main effects of motivation and scenario were also significant. The main effect of motivation,  $F(3, 258) = 90.17, p < .001$ , indicated that all three types of deception were more attributed to privacy concerns ( $M = 4.71$ ), idealized self-presentation ( $M = 4.67$ ), and play ( $M = 4.77$ ) than to malice ( $M = 3.30$ ). The main effect of scenario,  $F(2, 84) = 7.72, p < .001$ , revealed that participants made more or stronger attributions about underlying motivations in the cases of category deception ( $M = 4.50$ ) and identity concealment ( $M = 4.38$ ) than in the case of attractiveness deception ( $M = 4.20$ ).

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*Sonja Utz is an assistant professor of communication science at Free University Amsterdam. Her research interests are in the areas of social dilemmas in cyberspace and social relationships in virtual communities. She may be reached by e-mail at [s.utz@fsw.vu.nl](mailto:s.utz@fsw.vu.nl).*